

From the Desk of John Spitaleri Shaw . . .

As we continue to strengthen the role of the Office of Environment, Safety and Health, I want to take a moment to reflect on the tremendous contribution DOE-VPP sites have made in making DOE a safer place, and what I see as a very exciting future. As many of you know, I am no stranger to the VPP program. Early on in my tenure at DOE, I became aware of how VPP programs are making a positive change on how safety is viewed at our sites. I have seen the number of participating sites grow to 24 recognized STAR sites across the DOE complex. Over 30,000 contractor and subcontractor employees are working at DOE-VPP sites.

And VPP is making a difference—our DOE-VPP sites have seen significant declines in injury illness rates, and improvements in management and employee relations.



Our sites are also experiencing reductions in medical costs and lost work time. Reports also indicate job disruptions are often avoided because VPP has been implemented at the sites. In the process, we have created a safety conscious work environment with a strong safety culture.

DOE STAR sites have become leading examples to both private sector corporations and other Federal departments and agencies working toward STAR recognition. Just as we have been innovators in the field of safety and

health, we must never become complacent with our current status; but remember that our future success relies on our need to continuously build on what has now become a strong cultural safety base. With our successes

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Hanford Expo '05 Tops 40,000 Attendees

The Health and Safety Expo 2005 was a huge success with a total number of 40,036 attending. Thanks to all the Hanford contractors who allowed their employees time to

come see all that Expo 2005 had to offer. There were 140 exhibits along with 6 demonstrations of the Vehicle crash Demonstration (VAD), the Super Safety Safari performed by Richland Fire Department's Keith Ramsey, and an electrical demonstration performed by the Benton and Franklin County PUD utility workers.





The 2005 Jake Award Winners were Alicia Woodrich, Butch Parker, and Cliff Ledford (all Fluor Hanford

employees). The Jake Award is awarded to the most valuable member of the Expo Planning Team. This award was created in



staunch supporter and member of the

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comes our responsibility to share our lessons learned with other sites within the DOE complex aspiring to improve their safety programs, as well as with private industry companies looking to do the same.

Recently, I had the honor and privilege to present the employees of the 222-S Laboratory operated by CH2MHill Hanford Group with the STAR re-certification at their celebration activities. The 222-S Laboratory recertification was a testament to me of how the safety and health program at the laboratory has remained strong, and that the employees continue to embrace and incorporate the elements of VPP into their everyday work activities, resulting in a strong safety culture throughout the entire workforce. The excitement and enthusiasm I witnessed during the re-certification ceremony was a clear demonstration of the value VPP has added to making the laboratory a safe place to work.

What lies ahead of us is a great opportunity to share our successes both within the DOE complex and with corporate America as well as people of this great nation. A continued outreach activity, such as the mentoring of aspiring sites, is important. However, our sponsorship and participation in safety and health expositions such as the nationally regarded Annual Hanford Safety Expo demonstrates DOE's commitment and our Federal government's commitment to improving the safety and health of our citizens. Many people spend an entire career without ever finding, or having the privilege to work on such a worthy and honorable task!

The Office of Environment, Safety and Health is committed more than ever to support the continued expansion and enhancement of VPP throughout the complex. Our sites are actively involved in consulting with each other, providing support to new applicants preparing for headquarters onsite visits and are involved in mentoring activities outside the DOE complex.

Through a continued atmosphere of openness, cooperation, commitment to safety and health, and partnership with our commercial and Federal counterparts, I know we can continue to identify and implement needed program improvements that will most effectively address the challenges that lav ahead.

I would like to remind everyone of a statement made by President Bush regarding those of us in the executive branch of government. The President stated "...Some of us will serve in government for a season; others will spend an entire career here. But all of us should dedicate ourselves to great goals. We are not here to mark time, but to make progress, to achieve results, and to leave a record of excellence."

I look forward to working together and to our continued success. It is my intention that VPP will help us all leave a record of excellence.

Footnote:

John Shaw, former Deputy Chief of Staff and White House Liaison for the Department of Energy served as the Department's primary liaison with the White House and other Cabinet agencies before becoming the Assistant Secretary for the Office of Environment, Safety and Health. Shaw joined the Department of Energy in April 2002 as Principal Deputy Assistant Secretary for Environment & Health, working with DOE sites on matters concerning the health and safety of DOE employees. Prior to his work at the Department, Shaw worked for Patton Boggs LLP, planning and executing legislative and regulatory strategy on issues such as trade, campaign finance and congressional ethics. Shaw has also served as Majority Counsel for the Senate Government Affairs Committee. Shaw is a graduate of Syracuse University and Catholic University of America Law School.

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Health and Safety Exposition planning team. The Exhibit Awards went to the following:

Most Interactive—HAMMER



Kid's Favorite—Vehicle crash Demonstration (VAD)

Most Useful Information—HAPPY FEET



Best Overall—Advanced Med Hanford



Best Safety Presentation—PNNL Home Safety



Best Health Presentation—Kennewick General Hospital



Best Off Site—Grainger



Best Commercial—Richland Bike and Fitness



Fifty bicycles, donated by the Kennewick and Richland Police Departments and given to Richland Bicycles and Fitness Equipment who fixed everything that was wrong with the bicycles, were given away at Expo 2005. All the recipients seemed to be genuinely thankful for their bicycles.

The child that won this bicycle decided that Dad didn't have a bicycle, and needed one worse than he (the child) needed one, so he gave his bike to Dad.









The Three C's of VPP



The Occupational Safety and Health Administration (OSHA) is introducing three new pilot programs—the three C's of VPP—OSHA Challenge, VPP Corporate and VPP Construction Program. The new initiatives will expand programs to promote the safety and health of thousands more workers across the nation.

The Voluntary Protection Programs promotes effective worksitebased safety and health. VPP worksites save millions each year because their injury and illness rates are more than 50 percent below the averages for their industries.

OSHA Challenge

To provide greater opportunities to eligible employers interested in working with OSHA to create safer and healthier workplaces for their employees, OSHA has created the Challenge Pilot. This pilot is designed to reach and guide employers and companies in all major industry groups who are strongly committed to improving their safety and health management systems and interested in pursuing recognition in the Voluntary Protection Programs (VPP). OSHA Challenge provides participants a guide or roadmap to improve performance and ultimately to VPP Merit or Star. The Challenge program outlines the requirements needed to develop and implement effective safety and health management systems through incremental steps. At each stage, certain actions, documentation and outcomes are required in the areas covered by VPP criteria. Participants receive recognition from OSHA at the completion of each stage.

OSHA Challenge uses "qualified volunteers" to sponsor and act as Administrators for Challenge Participants. These Administrators may be corporations, Federal agencies, or nonprofit associations. Administrators will be selected by OSHA based on specific criteria. The Challenge Administrator will appoint a Coordinator(s) to manage the Challenge participants' progress through the stages. Challenge Administrators assist, encourage, track and periodically report to OSHA on the progress made by Challenge Participants. OSHA provides Challenge Participants numerous guides and tools to successfully progress through the development and implementation of each stage. Challenge Administrators are provided with tools by OSHA to operate, manage and track performance of their sponsored participants. Once a Challenge Participant successfully completes all the states, they may be considered for expedited participation in the VPP Star or Merit programs.

VPP Corporate

The VPP Corporate Pilot allows corporations committed to VPP and interested in achieving VPP recognition at facilities throughout their organization with a more efficient means to accomplish this goal. Corporations with well-established, standardized safety and health management systems implemented at facilities across the organization

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Bodman Sworn in as 11th Secretary of Energy

On February 1, 2005, Dr. Samuel Bodman was sworn in as the 11th Secretary of Energy of the United States Department of Energy. Secretary Bodman was confirmed unanimously by the United States Senate on January



31, 2005, replacing Spencer Abraham, who resigned on November 15, 2004.

"It is a great honor and personal privilege to serve President Bush and the American people as Secretary of Energy," said Secretary Bodman. "I look forward to working with the fine men and women of the Energy Department to advance this department's critically important missions. including preserving America's preeminence in the physical sciences, ensuring the responsible stewarship of our nation's nuclear weapons stockpile, advancing our international nuclear nonproliferation efforts. and ensuring reliable secure, affordable and environmentally responsible supplies of energy for our growing economy. Prior to being tapped by President Bush to lead the Energy Department, Bodman served as both Deputy Secretary of the Treasury (2003—present) and Deputy Secretary of Commerce (2001—2003). Before joining the Bush Administration. Bodman was Chief **Executive Officer of Boston-based Cabot** Corporation and President and Chief Operating Officer of Fidelity Investments. For six years prior to joining the private sector, Secretary Bodman served as an Associate Professor of Chemical Engineering at the Massachusetts Institute of Technology.

Secretary Bodman holds a bachelor's degree in chemical engineering from Cornell University, and a doctorate in science from the Massachusetts Institute of Technology.

Dyn McDermott Big Hill Strategic Petroleum Reserve Named 2005 Texas Award for Performance Excellence Recipient

The Quality Texas Foundation, administrator of Texas' premier annual performance excellence award, has selected the Dyn McDermott, operator of the Big Hill Strategic Petroleum Reserve site, based in Winnie, TX was selected as one of the recipients of the 2005 Texas Award for Performance Excellence.

The Bill Hill site is one of four crude oil storage sites owned by the U.S. Department of Energy Strategic Petroleum Reserve (SPR). The SPR was established by the Energy Policy and Conservation Act of 1975, and has become a global benchmark in oil storage. The Reserve is one of the top performing federal programs, as assessed by the Office of Management and Budget. It is the largest emergency crude oil reserve in the world, and is America's energy insurance against disruptions to the world's flow of crude oil. The Big Hill site is recognized for its leading role in innovation, organizational leadership and performance excellence. The Big Hill site as well as the other three SPR oil storage sites is a "STAR" site in the Occupational Safety and Health Administration's (OSHA) Voluntary Protection Program (VPP), STAR sites are those determined to have an outstanding safety and health program and VPP recognition is the highest safety and health recognition obtainable. In addition to STAR recognition in OSHA's VPP, the Big Hill site is also a STAR participant in the DOE's VPP.

In announcing the recipient on behalf of the Quality Texas Foundation Board of Directors, Chairman Dale Crownover had words of commendation. "It is an honor to recognize Dyn McDermott, Big Hill Strategic Petroleum Reserve as a recipient of the 2005 Texas Award for Performance Excellence in the small business category. Site Director Tim Lewis, the Big Hill

Leadership Team, and all staff are to be commended for their achievements in performance excellence and ongoing cycles of refinement demonstrated in the award process."

The Texas Award for Performance Excellence is patterned after the Malcom Baldrige National Quality Award criteria and process, and it is an annual recognition of Texas organizations that have achieved performance excellence and applied outstanding quality principles in their day-to-day operations. The award is presented to organizations that serve as role models for quality, customer satisfaction, and performance excellence in the state of Texas.

The 2005 awards were presented during the Texas Award Ceremony scheduled for the evening of June 16, in San Antonio, Texas. The Texas Quest for Excellence Conference was held the following day, June 17, and featured work-class Baldrige recipients from a variety of industries, as well as Dyn McDermott Big Hill SPR.

The Quality Texas Foundation, a non-profit Texas corporation, administers the Texas Award for Performance Excellence. The Foundation, with administrative offices located in Dallas, coordinates more than 300 volunteers from all areas of industry, government, education and health care who work together to assess and promote quality and performance excellence throughout the state.

For more information about the Texas Award for Performance Excellence, visit their website at www.texas-quality.org or call the Quality Texas Foundation office at (214) 565-8550.

OSHA Seeking More VPP Special Government Employees

The Voluntary Protection Programs' (VPP) Special Government Employee (SGE) program was created in 1994 to leverage OSHA's limited resources by using trained safety and health professionals from approved VPP sites to serve as team members on VPP onsite evaluation teams. More than 400 qualified SGEs are serving alongside OSHA safety and health professionals and are gaining perspectives on safety and health best practices, while also being able to network with some of the most qualified safety and health professionals in the country. Individuals from approved VPP sites interested in this exciting program can obtain more information on OSHA's website or call the agency's SGE Coordinator at (202) 693-2213.

CH2M HILL's 222-S Laboratory Flies "STAR" Flag Lab Recognized for Commitment to CH2MHILL Health and Safety

RICHLAND, WA — In recognition of its commitment to health and safety, CH2M HILL's 222-S Laboratory at the Hanford site has been recertified as a Star Site under the U.S. Department of Energy's Voluntary Protection Program (VPP). John Shaw, DOE Assistant Secretary for Environment, Safety and Health from Washington D.C., was at the 222-S Lab today to present the VPP Star flag to the laboratory during a brief ceremony and luncheon for employees.

The prestigious VPP Star Site program was established by DOE to encourage its operating facilities to develop and maintain excellent safety and health programs. VPP Stars are considered by DOE and the Occupational Safety and Health Administration (OSHA) to be models for their industry. The five tenents of the VPP program include:

- Management leadership that is actively involved in health and safety programs
- **Employee involvement** in establishing and maintaining health and safety programs
- Worksite analysis whereby processes are in place within the laboratory to identify, evaluate and correct hazards
- Hazard prevention and controls are adequate and available to ensure that worker safety and health are protected
- Training programs are in place to ensure that safety and health responsibilities are clearly identified to management and supervisors

"The safety and health program for 222-S Laboratory remains strong and its employees have embraced and incorporated the elements of VPP into their everyday work activities, resulting in a strong safety culture throughout the entire work force," said John Shaw, DOE Assistant Secretary for Environment, Safety and Health.

The 222-S Laboratory is a full-service analytical laboratory providing inorganic, organic, and radiochemical analysis in support of Hanford clean-up including primarily the analysis of waste samples from Hanford's underground waste storage tanks. Star status was originally granted to the laboratory in March 2003, shortly before operation of the lab transferred to CH2M HILL Hanford Group, Inc. Star status normally does not automatically transfer when contractors change, resulting in a new review by DOE.

"Star status is a testament to the quality of leadership in the laboratory, the quality of the people who work there and the involvement of the workforce in the laboratory's health and safety programs. I'm extremely proud of them and proud of their commitment to safety every single day." said Ed Aromi, CH2M HILL Hanford Group President ad General Manager.

Aromi also recognized the important partnership that CH2M HILL has with the Hanford Atomic Metal Trades Council (HAMTC) in fostering safety through the VPP Star Status. "The lab has worked hard to overcome challenges and achieve this status, and HAMTC appreciates each and every worker who contributed," said Jim Bateman, HAMTC President during the ceremony.

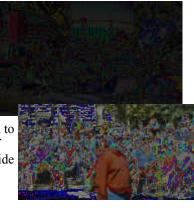
Prior to being recertified as a VPP Star, the 222-S Laboratory conducted an annual self-assessment in May 2004, and DOE conducted a concurrent review. In January 2005, DOE Headquarters personnel conducted their own program re-evaluation. The assessment included interviews with more than 70% of laboratory employees, field observations of work activities, participation in a number of safety-related meetings and reviews of safety-related documents and related records.

New Safety Card Highlights Safe Trenching Practices

OSHA has published a new safety information pocket card designed to help ensure safer trenching and excavation practices, while also explaining federal requirements for construction excavation safety. The card outlines required criteria for excavation of trench walls, as well as specific requirements for protective systems. The card is printed in English and Spanish.

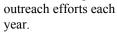
Outreach at INL

Students gaze
anxiously as Idaho
National Laboratory
(INL) emergency
personnel work
meticulously to free
the driver and
passenger of what used to
be a car. The sounds of
rescue equipment provide
the background as the
narrator tells the tragic
story of how these two



teens became trapped, fighting for their lives, because of drinking and driving. This live car crash scenario has been played out many times in eastern Idaho as part of the INL's Employee Safety Team (EST) community outreach efforts.

Reaching thousands of students and residents in eastern Idaho each year, the outreach program was established by the EST to share the safety values that have become a part of the INL's working culture. The EST helps with planning, organizing the volunteers and coordinating the





Another effective outreach program developed by the INL's EST is the *School Safety*Assembly. Each year team members

develop high-impact, interactive safety presentations aimed at exposing students and teachers to a wide and diverse range of safety topics. A summary of these presentations are then sent to schools in the area. The schools are then able to review the information and select several presentations they would like to have presented and when they would like them presented. This outreach activity has allowed the EST to stimulate curiosity about safety while teaching through engaging activities and interactive demonstrations that have proven to be crowdpleasing presentations.

Safety . . . I take it personally – more than just a safety slogan, it is a commitment that can be seen in the voluntary efforts of the safety team members and company employees of the INL in their community outreach efforts. With activities ranging from car crash scenarios to school safety assemblies, the EST is actively taking their safety message into the community.

BlackBerry Thumb: A Trendy New Health Concern

A new health condition is on the rise and the culprit originates from the overuse of little mobile communication devices called PDAs and BlackBerrys. The condition has been dubbed "BlackBerry Thumb" or "Overuse Syndrome" and stems from repetitive finger and thumb motions that can cause tenderness and pain in the palm, a tender nodule in the palm, and locking of the finger or thumb. In some cases, patients have reported symptoms that used to be common among video game players that include persistent or recurring discomfort, pain, tingling and aching in the hands.

Currently, there are approximately 2.5 million BlackBerry subscribers in the U.S., a number that has more than doubled in one year. More and more physicians and physical therapists across the country are beginning to see patients who use these devices with symptoms related to tendonitis, carpal tunnel syndrome, and "trigger finger." Use of these devices may also aggravate some arthritic conditions. Although these conditions for years have been common among some types of industrial workers, they are now affecting time conscious, multi-tasking white-collar workers who compose, send, and retrieve email messages from tiny hand-held devices. Unlike video game devices, hand-held communication devices require a greater range of motions that involve spanning the entire miniature keyboard with the thumb or finger for text messaging; using the thumbs and fingers in a manner for which they were not designed. Typing on these devices takes its toll on the tendons because it requires forceful micro-movements from hand muscles. Unlike typing on a larger keyboard similar to a desktop or laptop computer, micro-keyboards do not allow the larger shoulder muscles to reduce the strain in the hand muscles.

Preventing Hand Pain

The American Society of Hand Therapists recommends PDA and BlackBerry users to warm up their hand muscles prior to and after use. The society suggests exercises that require the spreading of the fingers as far as possible for 10 seconds and switching which hands and fingers do the taxing work.

If you are a regular PDA/BlackBerry user, and experience any discomfort and/or pain associated with these devices, you should promptly see a qualified health professional.

New Code System in NAICS

The North American Industry Classification System (NAICS pronounced Nakes) is a unique, all-new system for classifying business establishments. Adopted in 1997 to replace the old Standard Industrial Classification (SIC) system, it is the industry classification system used by the statistical agencies of the United States. It is the first economic classification system to be constructed based on a single economic concept. To learn more about the background, the development, and the difference between NAICS and the SIC, visit the following Census website: http://www.census.gov/epcd/www/naicsdev.htm.

NAICS industries are identified by a 6-digit code, in contrast to the 4-digit SIC code. The longer code accommodates the larger number of sectors and allows more flexibility in designating sub-sectors.

It also provides for additional detail not necessarily appropriate for all three NAICS countries.

The international NAICS agreement fixes only the first five digits of the code. The sixth digit, where used, identifies subdivisions of NAICS industries that accommodate user needs in individual countries. Thus, 6-digit U.S. codes may differ from counterparts in Canada or Mexico, but at the 5-digit level they are standardized.

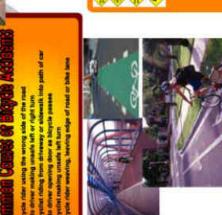
For additional information on SIC to NAICS or NAICS to SIC, please visit: http://www.census.gov/epcd/www/naicscod.htm.

Examples of NAICS Hierarchy

NAICS level	Example #1		Exa	mple #2	
		NAICS code	Description	NAICS code	Description
Sector	31-33	Manufacturing	51	Information	
Subsector	334	Computer and electronic product manufacturing	513	Broadcasting and telecommunications	
Industry group	3346	Manufacturing and reproduction of magnetic and optical media	5133	Telecommunications	
Industry	33461	Manufacturing and reproduction of magnetic and optical media	51332	Wireless telecommunications carriers, except satellite	
U.S. Industry	334611	Reproduction of software	513321	Paging	







Bicycle crashes and injuries are under-reported, since the majority are not

serious anough for emergency room visits.

with injuries every year, 67,000 with head injuries. About 540,000 bicyclists visit emergency rooms

4

About 800 bicyclists die in the US sach year. There are 85 million bicycle riders in the US.

444

Protect yourself at night with the required reflectors and lights

Use hand signals to bridicate burning or atopping.

Deter your bike defensively; watch out for the other guy,

Defree a safe talks. Have it inspected

One drink of alcohol increases a bicyclist's probabilly of serious injury or

The head is hit in 38 percent of the accidents.

8 8

1. In 8 of the cyclists with reported injuries has a brain injury.

Two-thirds of the deaths are from traumatic brain injury.

About half of the deaths are children under the age of 15.

Ta Falls represent 90 percent of the causes of accidents.

One third of bloycle fatalities have elevated blood alcohol levels.

death by a factor of six.



To view these posters, or to download printable files, go to:

http://www.eh.doe.gov/health/hservices/occmed/healthpromotion.html



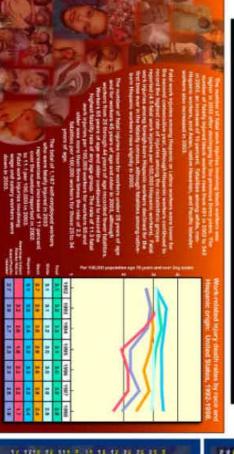






Sponsored by
John Spitaleri Shaw, Assistant Secretary for
Environment, Safety and Health





Disporting in Despendenced Traditional

Disporting in Despendenced Traditional

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Or features Salada Salada NO

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and Armed. The straight of the laterate for all operand becoming manning and and the behavior fragments between The more desilities a summer that friend converts to know that before an long of datase Americans, black, and Hoperica As a subsequences.

To view these posters, or to download printable files, go to: http://www.eh.doe.gov/health/hservices/occmed/healthpromotion.html

often experience significant duplication of effort when applying for VPP participation for individual facilities. The purpose of this pilot is to meet the needs of large corporations by eliminating the redundancy in the VPP application and onsite evaluation processes while maintaining the quality and integrity of VPP. With streamlined processes designed to address these specific needs, corporations can efficiently increase their participation in VPP and obtain the many significant benefits of VPP. A corporation in the VPP Corporate can expect to experience benefits such as safer and healthier workplaces; greater protections for employees; and a strong corporate identity as a leader in the safety and health community.

Interested corporations just submit an application to OSHA describing how standardized corporate-level policies and programs consistent with VPP criteria are applied at facilities across their organization. Following a review of the application, OSHA will conduct a comprehensive Corporate Program Evaluation at the corporate office/headquarters to verify the contents of the application. Once the Corporation is accepted into the program, all of their eligible facilities will follow streamlined application and onsite evaluation processes. The streamlined facility application requires only facilityspecific information and eliminates the need to repeat information contained in the Corporate VPP Application. The streamlined facility onsite evaluation will evaluate only selected VPP elements. Once the individual facility is approved as a VPP site, all standard VPP requirements apply.

VPP Construction Program

The VPP Construction Program addresses the unique needs of the construction industry. Over the last several years, OSHA implemented two pilot/demonstration

programs to evaluate alternative VPP criteria for construction employers. These programs focused on short-term construction projects and mobile workforce employers.

These pilots were evaluated and showed positive and beneficial results for participants. As a result, the design of the VPP Construction Program is being modeled closely after these pilots. The program's goal is to make VPP more accessible to construction employers, especially small construction employers. This program will maintain the high standards of VPP while expanding participation to broad categories of employers within the construction industry such as short-term projects, mobile workforces, general contractors and sub-contractors.

Contact Information

For more information on VPP, contact the VPP Manager at your OSHA Regional Office or OSHA's Office of Partnerships and Recognition at:

U.S. Department of Labor Occupational Safety and Health Administration Directorate of Cooperative and State Programs Office of Partnerships and Recognition 200 Constitution Ave., NW Washington, DC 20210

Telephone: (202) 693-2213

This is one in a series of information fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulation, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

Building Trust for Safety

Trust is a cornerstone of an effective safety program. These steps can help you nurture trust in your organization.

by Robert Pater

My friend's father was a plant electrician before he got hurt. Highly skilled guy, very bright and motivated to excel at whatever he puts his hands on. But that's the problem. He can't easily put his hands on anything. He has no ability to torque/twist his wrist, due to cumulative injury to small carpal bones in his hands. After corrective surgery, he was supposed to be on light duty to heal but his supervisor changed his job title and had him work his old job. He wound up permanently hurt. His employer denied his long-term disability claim on a technicality. He ran out of savings trying to hire an attorney to fight his case. He can't work — can't even help his daughter install a fan in her new house. He feels

Department of Energy
Voluntary Protection Program Sites



Battelle Memorial Institute (BMI)
Pacific Northwest National Laboratory
Hanford Site—Richland, WA

Central Plateau Remediation Project (CPRP) Fluor Hanford, Inc. Hanford Site—Richland, WA

Day & Zimmerman Protection Technolofy Hanford (PTH) Fluor Hanford, Inc. Hanford Site—Richland WA

DynMcDermott Petroleum Operations Co., Inc. - Bayou Choctaw Site Strategic Petroleum Reserve Project Management Office

DynMcDermott Petroleum Operations Co., Inc. - Big Hill Site Strategic Petroleum Reserve Project Management Office Winnie, TX

DynMcDermott Petroleum Operations Co., Inc. - Bryan Mound Site
Strategic Petroleum Peccano Project Management Office

Strategic Petroleum Reserve Project Management Office Freeport, TX

DynMcDermott Petroleum Operations Co., Inc. - West Hackberry Site Strategic Petroleum Reserve Project Management Office Hackberry, LA

Fast Flux Test Facility (FFTF) Fluor Hanford, Inc. Hanford Site—Richland, WA

Fluor Government Group (FGG) Fluor Hanford, Inc. Hanford Site—Richland, WA

Fluor Fernald, Inc. (FFI) Fernald Closure Project Ohio Field Office—Fernald, OH

Project System and Support (PSS) Fluor Hanford, Inc. Hanford Site—Richland, WA Nuclear Materials Stabilization Project (NMSP)_ Fluor Hanford, Inc. Hanford Site—Richland, WA

Volpentest Hazardous Waste and Emergency Response Training and Education Center (HAMMER) Fluor Hanford, Inc. Hanford Site—Richland, WA

Wackenhut Services, Inc.—Nevada Test Site Nevada Operations Office—Las Vegas, NV

West Valley Nuclear Services Company, LLC (WNVS)
Washington Group International
West Valley Demonstration Project (WVDP) - West Valley, NY

Westinghouse Savannah River Company Washington Group International Savannah River Operations Office—Aiken, SC

Washington TRU Solutions, Inc. Washington Group International Waste Isolation Pilot Project—Carlsbad, NM

Bechtel SAIC Company, LLC Joint Partnership of Bechtel Corp., Inc. and SAIC Yucca Mountain Project (YMP) - Las Vegas, NV

Oak Ridge Institute for Science and Education (ORISE) Managed by Oak Ridge Associated Universities (ORAU) Oak Ridge, TN

Environmental Restoration Contractor (ERC) - Bechtel Hanford, Inc. Hanford Site—Richland, WA

Honeywell International Federal Manufacturing and Technologies/New Mexico (FM&T/NM) Kansas City Site Office—Albuquerque, NM

CH2M HILL Hanford Group Analytical Technical Services Laboratory 222-S Office of River Protection Richland, WA (Continued from page 11) terrible, and all his co-workers know about this and remain angry.

It's probably no surprise that employee trust for leadership is low, and that this affects safety performance. There's some good news; a recent Watson Wyatt study of nearly 13,000 workers reveals that trust levels are rising slightly. The percentage of employees who express trust and confidence in their senior executives increased from 44 percent in 2002 to 51 percent in 2004 (back to about the same levels as 2000). The bad news is that, even with this rise, about half of all workers don't trust their leaders.

Less than one-third of workers believe their company does a good job of helping poor performers improve. My experience is consistent with this data; very few organizations do an effective job helping those who've had repeat accidents get out of their "frequent flier" pattern.

Why bother? Because trust can provide a competitive edge. An International Association of Business Communicators study associated high levels of trust with improved profitability and customer satisfaction. Employee trust boosts program and procedural buy-in, helps the learning of new skills, raises efficiency and provides you and your company with a competitive edge. Trust me, if you can become skilled as a trust builder, you will always be respected and in demand.

What can you personally do to boost trust for safety performance?

- 1. Acknowledge employees' concerns as valid and that they may have good reason for suspicion. Let them know when you have mixed reactions to new procedures or policies, rather than maintaining an all-is-wonderful front. Root out don't wait for mixed messages that are broadcast in the name of safety ("Hurry up, but don't take shortcuts"). Be the one to find inconsistencies first in policies, promotional or contractor requirements. Let them know when you've made mistakes (abolish know-it-all-ism and never-wrong-ism). Practice tolerance for different learning and communication styles, as well as levels of risk tolerance.
- 2. Seek out and reply. Don't avoid or squelch resisters seek them out. Some will, in reality, be spokespersons and provide meaningful information to help your planning. Further, you can reduce pushback by their getting angry reactions off their chests in a safe manner. Make "thank you" your default for receiving negative feedback; don't let yourself become defensive (which can reduce your credibility). Become an "early responder;" get back to

people quickly on their concerns (doesn't mean you'll solve everything, just respond honestly). Watch reactions build and develop a nip-it-in-the-bud approach. Reduce blaming anywhere it is related to safety (in accident investigations, with "accident repeaters," etc.).

- 3. Perspective. Remind yourself and others that we live in challenging and changing times. Long-past promises may have been well-intentioned but short-sighted. Be straightforward about organizational realities. Re-frame expectations, making them more realistic. Remind employees at all levels of the benefits of safety, and don't merely expect them to change because you say so. Endeavor to use less-loaded words that still do the job (e.g. we always speak of "becoming more in control of your personal safety" rather than "you will be held accountable"). Dedicate yourself to continuous improvement, even if your safety record isn't currently where you'd like it. Try new things; don't just recycle the same old stuff.
- **4. Involve.** Activate safety committees by training them, and give them real work with high expectations. Enlist select workers as peer instructors and safety change agents. Recruit allies for safety up, down and sideways (vendors and customers too). Practice effective delegation. Ask for advice don't try to do it alone. Respect the fact that there are many different ways people can become involved.
- **5. Persistent patience.** Abandon the quick-fix mentality and go for continuous improvements. Weave safety into all communications. Ask yourself, "How will this new tool/procedure/promotion affect safety and trust?" Make training honest, practical, involving and enjoyable. Spread credit generously. Continue to ask questions of others and of yourself. Boost your own credibility and trustworthiness.

Ralph Waldo Emerson wrote, "Trust men and they will be true to you; treat them greatly and they will show themselves great." Trust, like the buried foundation of a building, is not always directly visible, but critical for erecting a stable structure. Keep trust formation in the back of your mind and consider it in your underlying plans. Help make trust in safety a cornerstone for improved personal and organizational performance.

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- Robert Pater

How to Protect the Aging Work Force

Changes in the body and the mind as we age require employers to take steps to adapt the workplace and tasks before injuries occur. In part one of her series, ergonomics expert Cynthia Roth examines the physical changes facing aging workers and their impact on the workplace.

by Cynthia L. Roth

It is the smart administrator, engineer, safety professional or health provider who understands the value of the veteran employee – as well as the problems and risks facing employees when they grow older. We want the brain power and the experience and knowledge, but not the lost work-time days, workers' compensation claims or any of the negatives associated with injuries/illnesses.

Just when the old are most needed in the work force, government policies encourage early retirement and employers are afraid to maintain the older work force based on their fear of some aspects of human aging.

What is so significant about human aging and our bodies? If you have not already started to experience some of these changes, get ready. They do happen and they are natural. We will all have them to some degree:

- Loss of strength
- Loss of muscular flexibility
- Loss of joint range of motion
- Diminished postural steadiness
- Reduced grip strength
- Reduced nervous system responses
- Reduced blood flow and tactile feedback
- Reduced visual capacity
- Slowing of our mental processing

Strength and Flexibility

Let's begin at the beginning of the list. Loss of strength happens due to decreased muscle mass and the diminished force capabilities of our muscles. They take longer to respond to an action and fatigue faster as we age. As muscles age, they begin to shrink and lose mass. This is a natural process, but a sedentary lifestyle can accelerate it. The number and size of muscle fibers also decrease. It takes muscles longer to respond in our 50s than they did in our 20s. The water content of tendons – the cord-like tissues that attach muscles to bones – decreases as we age. This makes the tissues stiffer and less able to tolerate stress. The chemistry of cartilage, which provides cushioning between bones, changes. With less water content, the cartilage becomes more susceptible to stress. As cartilage degenerates, arthritis can develop. Ligaments, connective tissues between bones, become less elastic, reducing flexibility. Relax! All is not lost ... there are solutions!

What should an employer do to assist its employees -- at any age -- to prevent injuries to muscles and other soft tissues of the body? Find the jobs that possess the greatest

physical risks to the various soft tissue groups through an organized, systematic process that is quantifiable. This will assist in prioritizing the jobs that need to be changed as well as those that could be used for return-to-work and to keep employees working longer. Some of the ways to help employees include:

- Reduce work with static muscle effort (e.g. sustained, fixed postures).
- Increase use of mechanical lifts.
- Keep work in "neutral zone."
- Eliminate twisting of the upper torso.
- Stretch upper body throughout the day.
- Continue or begin regular exercise programs.

Stretching after working also keeps the muscles flexible and reduces the risks of injuries. Joint motion becomes more restricted and flexibility decreases with age because of changes in tendons and ligament. As the cushioning cartilage begins to break down from a lifetime of recreation, daily living activities and job tasks, joints can become inflamed and arthritic. Employees' joints become more painful in cold, damp weather. Jobs that require excessive and repetitive lifting, reaching, pushing or pulling will eventually create lost work days and workers' compensation claims for employees' with arthritis or bursitis in their joints.

The solution is to find and reduce the weights, reaches, lifts, carries, pulls and pushes through the use of mechanical ergonomic manual material handling aides.

Postural Steadiness

Postural steadiness can be assisted through fixtures that are designed "in-house," when possible, to assist in the holding of any product. Also, range-of-motion exercises and isometric and isotonic strength-training exercises, flexibility exercises and progressive strength-and balance-training exercises might be suggested. Aquatic therapy, fancy terminology for exercises in a swimming pool, provides a reduced weight-bearing environment. It allows workers to perform movements in the water with reduced stress on joints and provides resistance for strengthening, toning and stabilization. Exercising in water also increases strength and endurance, increases range of motion, decreases swelling of ankles, improves balance and coordination, improves circulation and assists in stabilization around joints.

This exercise also would assist the older worker in reducing the risks of trips and falls. You don't have to put in a backyard pool for this type of anti-aging regimen. There are YMCAs, health clubs and university atheletic departments that have pools in communities of all types. Sometimes, a physician's prescription can get you a reduced rate, too.

Reduced grip strength goes along with reduced muscle and soft tissue capabilities. Handgrip strength decreases, making it more difficult to accomplish routine activities such as gripping, lifting, turning a valve, opening a jar or pulling tasks. We can assist the aging worker by reducing the time spent on jobs that require a lot of grip strength or by providing mechanical assists. Choosing tools and handheld devices that are appropriately sized for the human hand helps to compensate for reduced grip strength.

Hot and Cold

As we age, our blood supply begins to slow as our heart is unable to pump the same volume that it did when we were 20. One of the symptoms of increased aging is the diminished nervous system response and reduced tactile feedback. Humans experience decreased insulin production (might produce diabetes) and decreased thyroid function. These issues all lead to a decreased tolerance to heat or cold.

"Aging is often associated with decreased physiologic function, including a decreased ability to regulate body temperature effectively during heat stress. Older individuals respond to an imposed heat challenge with higher core temperatures and heart rates, lower sweating rates and a greater loss of body fluid compared to younger individuals," wrote W. Larry Kenney, Ph.D., in Sports Science Exchange, Volume 6 (1993).

According to the Center for Environmental Physiology, the body needs time to adjust to hot weather. A sudden increase in temperature is particularly serious because it can place a dangerous strain on the heart and blood vessels before the body can acclimate itself. Heat stress, which can lead to heat exhaustion, heart failure and stroke, may well be a life-threatening problem for the aging employee who is working in continuously hot environments. These exposures can be outdoor or indoor.

Older employees are more vulnerable to heat stress than younger employees because they do not adjust as well to heat. They perspire less. They are also more likely to have health problems requiring medications that work against the body's natural defenses for adjusting to heat. For example, diuretics (often prescribed for high blood pressure, a common disease of the aging) prevent the body from storing fluids and restrict the opening of blood vessels near the skin's surface. Certain tranquilizers and drugs used to treat Parkinson's disease interfere with perspiring. These and other chronic conditions (such as circulatory problems, diabetes, a previous stroke, overweight and a weak or damaged heart) often upset normal body responses.

The best advice for avoiding heat stress is to keep employees as cool as possible. Solutions are not cheap for aging employees working indoors in a hot environment. Air conditioning can provide the best protection from heat stress, especially if a worker has heart disease. In many organizations, it is not possible to cool the working environment with air conditioning. Fans, though, can help to circulate indoor air during the day. Air movement reduces heat stress by removing extra body heat. Loose fitting, lightweight, light-colored clothing is more comfortable in hot weather. Hats and umbrellas protect the

head and neck when employees are working outdoors. The body needs more water in hot weather. Employees shouldn't wait until they are thirsty to have a drink. If they have a medical condition, or a problem with body-water balance, they should check with their doctor for advice on how much water to drink during exposure to excessive heat. Have them avoid hot foods and heavy meals. They add heat to any body. Always provide education to your employees on the symptoms and the solutions for heat-related occupational hazards.

Employees who must work outdoors may also face exposure to the cold. Prolonged exposure to freezing temperatures can result in health problems as serious as trench foot, frostbite and hypothermia. Workers in such industries as the postal service, construction, commercial fishing, food warehousing and agriculture need to be especially mindful of the weather, its effects on the body, proper prevention techniques and treatment of cold-related disorders. When body temperature drops even a few degrees below its normal temperature of 98.6 degrees F (37 degrees C), the blood vessels constrict, decreasing peripheral blood flow to reduce heat loss from the surface of the skin. With an older employee, the blood vessels have constricted normally with age and this increases the risks of working in a cold environment. The four environmental conditions that cause cold-related stress

- Low temperatures
- High/cool winds
- Dampness
- Cold water

Preventing long-term exposures to extreme hot and cold environments is the best way to protect the aging employee – and all employees. For any cold exposure, the next step is personal protective equipment. Providing adequate layers of insulation is perhaps the most important step in fighting the elements.

Employees should wear at least three layers of clothing:

- An outer layer to break the wind and allow some ventilation (like Gore-Tex or nylon).
- A middle layer of wool or synthetic fabric (Qualofil or Pile) to absorb sweat and retain insulation in a damp environment. (Down is a useful lightweight insulator; however, it is ineffective once it becomes wet.)
- An inner layer of cotton or synthetic weave to allow ventilation.

Pay special attention to protecting feet, hands, face and head. Up to 40 percent of body heat can be lost when the head is exposed. Footgear should be insulated to protect against cold and dampness. Keep a change of clothing available in case work garments become wet. Educate all employees regarding exposures to cold.

Reduced Visual Capacity

Aging employees also experience vision-related problems. One of the tell-tale signs of being "over the hill" is the need for reading glasses. The need for help to see close objects or small print is due to a condition called

presbyopia (prez-bee-OH-pee-uh). It is a normal process that happens over a lifetime. You and your employees may not notice any change until after the age of 40. People with presbyopia often hold reading materials at arm's length; the joke is the need to "grow longer arms." Some employees may get headaches or "tired eyes" while reading or doing other close work. This is a common symptom. Presbyopia is often corrected with reading glasses, but the employer needs to pay attention to the lighting levels for aging employees as well. Appropriate lighting needs to be task-specific.

Aging employees may also complain of floaters – tiny spots or specks that float across the field of vision. Most people notice them in well-lit rooms or outdoors on a bright day. Floaters often are normal, but sometimes they warn of eye problems such as retinal detachment, especially if they happen with light flashes. If an employee notices a sudden change in the type or number of spots or flashes, recommend an eye doctor check.

Cataracts are cloudy areas in part or all of the eye lens. The lens is usually clear and lets light through. Cataracts keep light from easily passing through the lens, and this causes loss of eyesight. They often form slowly and cause no pain, redness or tearing in the eye. Some stay small and don't change eyesight very much. If a cataract becomes large or thick, it usually can be removed by surgery. During surgery, the doctor takes off the clouded lens and, in most cases, puts in a clear, plastic lens. Cataract surgery is very safe. It is one of the most common surgeries done in the United States.

Retinal disorders are a leading cause of blindness in the United States. The retina is a thin lining on the back of the eye. It is made up of cells that get visual images and pass them on to the brain. Retinal disorders include age-related macular degeneration, diabetic retinopathy and retinal detachment.

There are other medical conditions associated with aging employees such as dry eyes, tearing, glaucoma and macular degeneration. Have your health care professionals stay up to date on the vision problems associated with aging and remember that education is the key to employee eye health.

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Senate Bill Would Offer Tax Incentives to Companies That Provide Gym Memberships

Companies that pay for or subsidize offsite fitness center memberships for their workers will be able to deduct those costs from their taxes if a bipartisan Senate bill is voted into law.

The Workforce Health Improve Act (WHIP), introduced April 13 by Sen. John Cornyn, R-Texas, and Sen. Tom Harkin, D-Iowa, would allow businesses to deduct the cost of subsidizing or providing offsite fitness center memberships for their employees and would exclude such wellness benefits from being considered taxable income for employees.

Existing tax laws do not allow businesses to deduct the costs of offsite gym memberships for their workers while also requiring such wellness benefits to be considered taxable income for employees.

Cornyn and Harkin first introduced the WHIP Act in 2003. While the original bill never saw the light of day, the bill's sponsors are hopeful that the current focus on overhauling existing tax laws might offer more opportunities for the bill to find a "vehicle," or a larger bill on which the WHIP Act could be attached, according to a spokesperson in Cornyn's press office.

The WHIP Act encourages workers to live healthier lifestyles by making it easier for employers to offer wellness benefits such as gym memberships, according to the bill's sponsors.

"Physical inactivity is a key contributing factor to overweight and obesity and adversely affects workforce productivity," Harkin said. "We quite simply need to make it easier for employers to encourage physical activity. We must give people the tools they need to stay healthy and stay out of the hospital."

While the health problems associated with overweight and obesity have cost businesses more than \$15 billion, according to the Centers for Disease Prevention and Control, it is estimated that only 15 percent of adults perform the recommended amount of physical activity. That adds up to a "super-sized health crisis," according to Harkin.

"A physically fit population results in lower health care costs, reduced government spending, fewer illnesses and improved worker productivity," Cornyn said. "It's important to create as many incentives as possible to get Americans up and moving."

The International Health, Racquet and Sportsclub Association, a non-profit trade organization, lauded the bill as a "fundamental step in providing American employers and employees with the tools they need to stop the devastating health trend toward inactivity and obesity in America."

"Current health statistics make clear the need to mobilize on a national level to counter the health crisis of inactivity we now face," said John McCarthy, executive director of the association. "This measure is an essential step in providing real-world incentives necessary to promote physical activity in the workplace."

- Josh Cable